

June 10, 2016 10:18:05 AM

U/R

147735

Ball Only
CCG

Page 1

Item Name: Drive Shaft Tunnel Modification

Start Date: 6/10/2016 **Start Qty:** 2.00

Required Date: 6/20/2016 **Req'd Qty:** 2.00

Reference: *bell*

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals: Process Plan: SH Date: 6/10/16 , Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop ***NR2***

[illegible]

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐						OTHER : ☐	

Work Order ID 147735

June 10, 2016 10:18:05 AM

147735

Page 2

Item ID: D412-705-015 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: URF 16-530 Stop ***NS2***
 Item Name: Drive Shaft Tunnel Modification
 Start Date: 6/10/2016 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 6/20/2016 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00				2X		DAS 28 9-89	
130	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-705-015								
Packaging	Location: PG027								
	Pat Duval's Office								
140	QC21- Final Inspection - Work Order Release	0.00							
140	Memo	0.03							
QC									
Quality Control									

JUN 20 2016

16/6/2016

Set 6/20/16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____			

Picklist Print

June 10, 2016 10:18:12 AM

Page 1

Work Order ID: 147735

147735

Parent Item: D412-705-015

D412-705-015

Parent Item Name: Drive Shaft Tunnel Modification

Start Date: 6/10/2016

Required Date: 6/20/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:B Removed Manufacturing 06-10-03 JLM
 IPP Rev:C ECN 1052 07-11-05 DD verified by:EC IPP Rev:D
 ECN 12-670 12.11.07 DD Verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

AN3C3A		Purchased		No		110	Each	273.0000	22	44			
--------	--	-----------	--	----	--	-----	------	----------	----	----	--	--	--

AN3C3A
 Bolt

Location	Loc Qty	Loc Code
GA	66	
m134055	66	
OVER002	100	
m134676	100	
ST350	107	
m134370	7	
m134509	100	

DAS
 27
 9-89

DAS
 26
 9-89
 DAS
 28
 9-89

JUN 14 2016

5K.
 39x

Picklist Print

June 10, 2016 10:18:12 AM

Page 2

Work Order ID: 147735

147735

Parent Item: D412-705-015

D412-705-015

Parent Item Name: Drive Shaft Tunnel Modification

Start Date: 6/10/2016

Required Date: 6/20/2016

Start Qty: 2.00

Required Qty: 2.00

AN3C4A

Purchased

No

110

Each

1,038.000

3

6

AN3C4A

Bolt

DAS
26
9-89
DAS
28
9-89

Location

Loc Qty

Loc Code

FG

20

122814

20

FP001

715

M133440

7

M134396

41

M134509

6

M134606

29

M134676

44

M134762

588

OVER002

200

M134861

200

ST350

103

M134134

18

M134396

85

D3256-1

Manufactured

No

110

Each

1.0000

1

2

D3256-1

Panel

60x.

146146

DAS
28
9-89

Location

Loc Qty

Loc Code

ST484

1

~~142302~~

1

DAS
27
9-89

Use 146146^(u) in Pat Duvals Office.

JUN 15 2016

Picklist Print

June 10, 2016 10:18:12 AM

Page 3

Work Order ID: 147735

147735

Parent Item: D412-705-015

D412-705-015

Parent Item Name: Drive Shaft Tunnel Modification

Start Date: 6/10/2016

Required Date: 6/20/2016

Start Qty: 2.00

Required Qty: 2.00

D3256-3

Manufactured No

110 Each

13.0000

D3256-3

Gasket

DAS
27
9-89

Use for Bell -> 146147
ST486

Location

Loc Qty

Loc Code

ST

4

146147

4

ST486

9

129868
137200

1

8

MS20427M3-3

Purchased No

110 Each

2,070.000

MS20427M3-3

Rivet

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

1313

m133577

313

m134738

1000

ST311

757

m134738

757

MS21060-L3K

Purchased No

110 Each

194.0000

MS21060-L3K

Nut Plate

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

37

m132256

37

ST300

157

m134370

1

m134567

31

m134676

25

m134861

100

1

2

**

146147

8-89

DAS
28
9-89

JUN 15 2016

44

88

**

DAS
28
9-89
9-89

22

44

**

DAS
26
9-89
9-89

JUN 14 2016

31X
13X

Picklist Print

Page 4

June 10, 2016 10:18:12 AM

Work Order ID: 147735

147735

Parent Item: D412-705-015

D412-705-015

Parent Item Name: Drive Shaft Tunnel Modification

Start Date: 6/10/2016

Required Date: 6/20/2016

Start Qty: 2.00

Required Qty: 2.00

MS9321-09

Purchased

No

110

Each

395.0000

25

50

**

DAS
26
9-89

DAS
28
9-89

MS9321-09

Washer

Location

Loc Qty

Loc Code

ST267

395

m133990

45

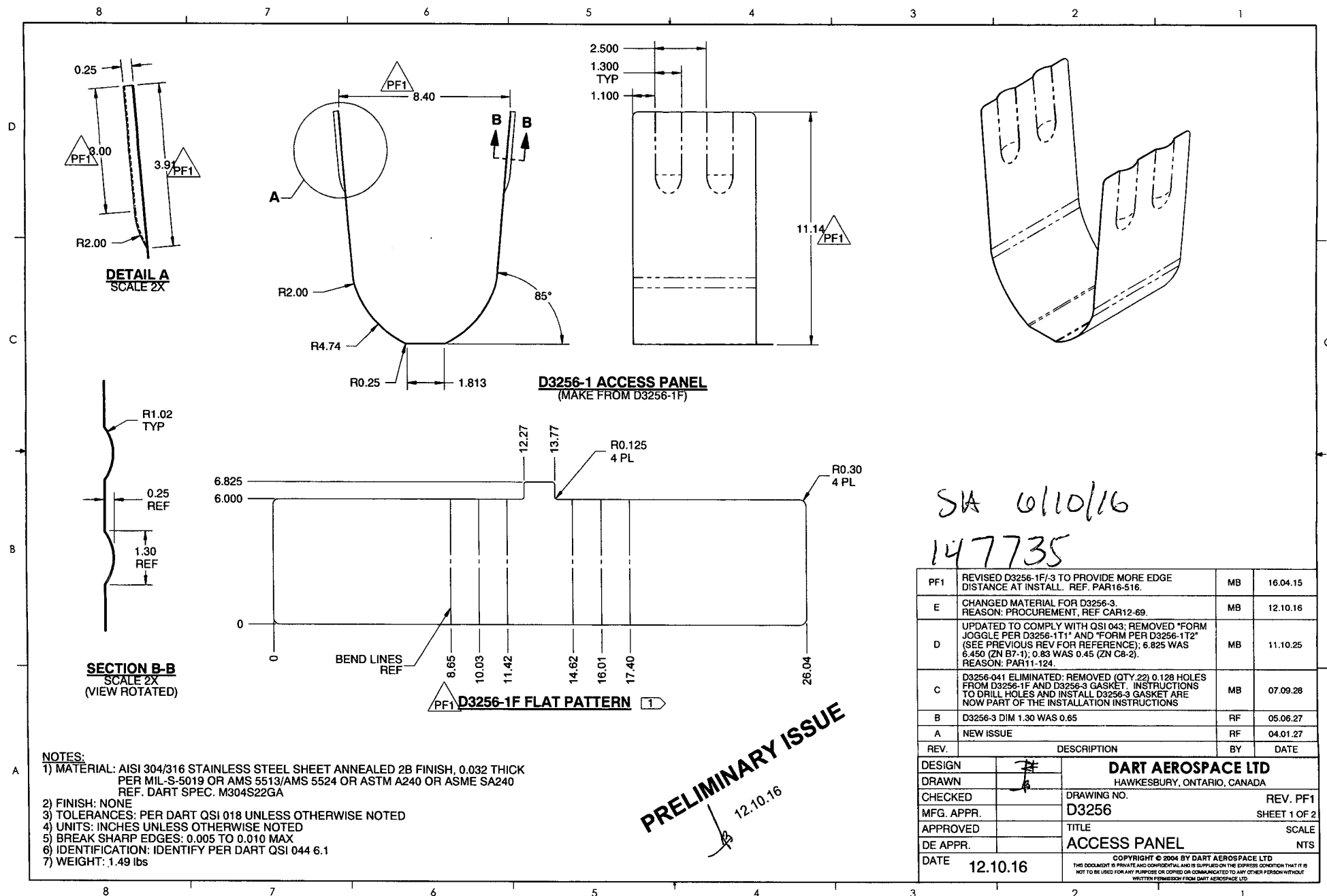
m134676

350

50X.

JUN 14 2016

DAS
27
9-89



8 7 6 5 4 3 2 1

D

D

C

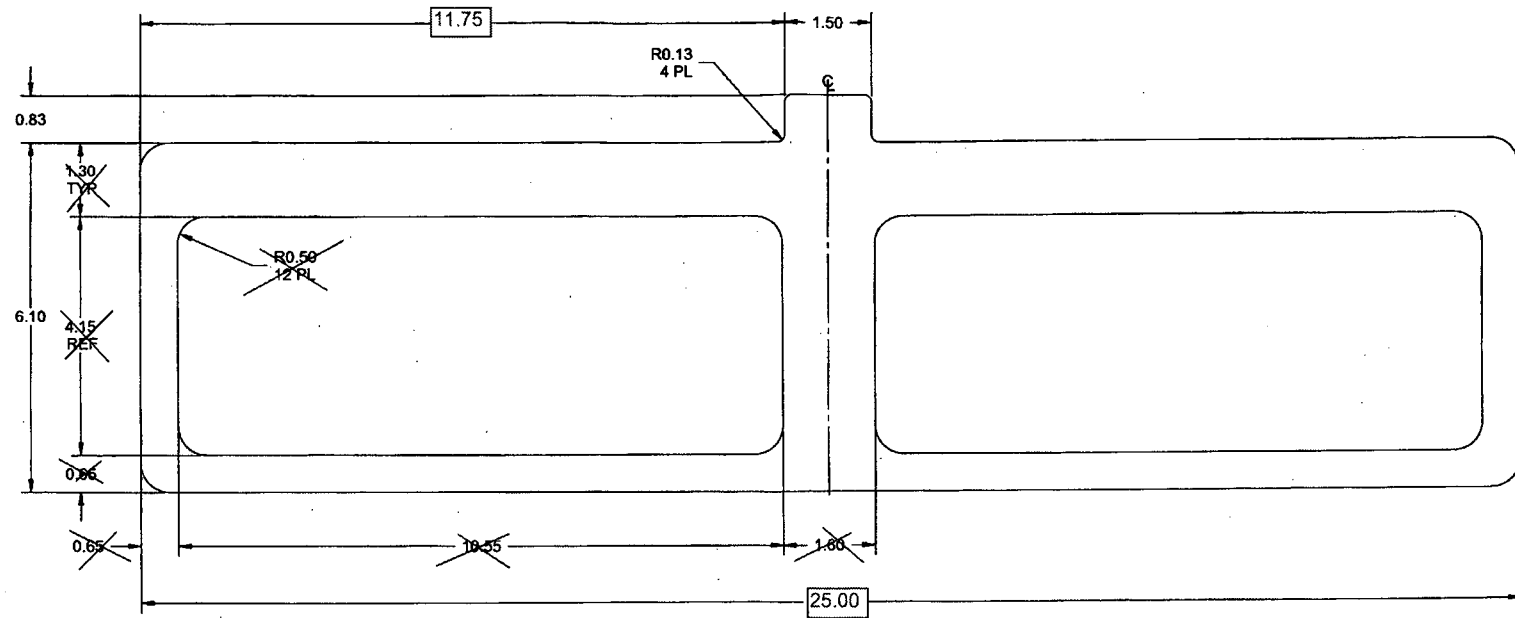
C

B

B

A

A



D3256-3 GASKET

RELEASED
2012-11-06

SA 6/10/16
147735

NOTES:

- 1) MATERIAL: THERMO-CHEM P/N G-89, 0.060 THICK
POSSIBLE SUPPLIER: A.R. THOMSON GROUP
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.12 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D3256	REV. E
MFG. APPR.		SHEET 2 OF 2	
APPROVED		TITLE	SCALE
DE APPR.		ACCESS PANEL	NTS
DATE	12.10.16	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

8 7 6 5 4 3 2 1

REFERENCE ONLY

DART AEROSPACE LTD.

IIN-D412-705

Page 16 of 16

5.0 PARTS LIST

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Part Number	Description
X							D412-705-011	TWIN PAK E-Z ACCESS KIT
1	X						D412-705-013	INTAKE PLENUM ACCESS PANEL KIT
1		X					D412-705-015	DRIVESHAFT TUNNEL MODIFICATION KIT
1			X				D412-705-017	N1 GEARBOX ACCESS PANEL KIT
1				X			D412-705-019	C-BOX OIL COOLER LINE SUPPORT ACCESS KIT
1					X		D412-705-021	OIL PRESSURE TRANSMITTER ACCESS KIT
1						X	D412-705-023	OIL COOLER SUPPORT REMOVABLE LOWER PANEL KIT
	1						D3245-041	ACCESS PANEL ASSEMBLY, LH
	1						D3245-042	ACCESS PANEL ASSEMBLY, RH
	2						D3245-043	DOOR ASSEMBLY
	2						D3245-9	GASKET
	2						D3245-11	GASKET
	2						D3245-13	GASKET
			1				D3255-041	ACCESS PANEL ASSEMBLY, LH
			1				D3255-042	ACCESS PANEL ASSEMBLY, RH
		1					D3256-1	ACCESS PANEL
		1					D3256-3	GASKET
				1			D3259-041	ACCESS PANEL ASSEMBLY, LH
				1			D3259-042	ACCESS PANEL ASSEMBLY, RH
					1		D3307-041	ACCESS PANEL ASSEMBLY
						30	AN3-3A	BOLT
		22	30		6		AN3C-3A	BOLT
		3					AN3C-4A	BOLT
						30	AN960JD10	WASHER
16	44	36			12		MS20427M3-3	RIVET
						2	MS21051-L3K	NUT PLATE
8	22	18			6		MS21060-L3K	NUT PLATE
						18	MS21069-L3K	NUT PLATE
		25	30		6		MS9321-09	WASHER

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Revision: E

Date: 13.10.07

Work Order ID 147735

Wednesday, June 15, 2016 10:23:00 AM

147735

Page 1

Item ID: D412-705-015

Accept

N900040100Setup Start ***NS1***

Revision ID: URF 16-530

Stop ***NS2***

Item Name: Drive Shaft Tunnel Modification

Start Date: 6/10/2016 Start Qty: 2.00

2

Cust Item ID:

Required Date: 6/20/2016 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN-D412-750	E U/R								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D412-705-015	CHG 005							
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.01							
Quality Control									

ML5 JUN 15 2016